

Broadway Veterinary Clinic)	Departmental
Penobscot County)	Findings of Fact and Order
Bangor, Maine)	Air Emission License
A-95-71-D-A)	Amendment #1

After review of the air emissions license amendment application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Broadway Veterinary Clinic (BVC) of Bangor, Maine was issued Air Emission License A-95-71-C-R on June 17, 1999 permitting the operation of emission sources associated with operation of their Class IV-A veterinary incinerator.

BVC has requested an amendment to their license in order replace their incinerator with a newer model.

B. Emission Equipment

BVC is proposing to install a Jarvis Model ISI40 incinerator, with the following specifications:

Class Incinerator	IV-A
No. of Chambers	2
Type of Waste	Type 4
Max. Charge Size	400 lbs.
Burn Rate	100 lb/hr
Auxiliary Fuel Input:	
Primary Chamber (Btu/hr)	750,000 firing natural gas
Secondary Chamber (Btu/hr)	1,500,000 firing natural gas
Monitor	Continuous chart recorder for secondary chamber temp.
Emission Control	Afterburner

C. Application Classification

The modification of a minor source is considered a major modification based on whether or not expected emission increases exceed the “Significant Emission Levels” as given in Maine’s Air Regulations. The changes proposed in this amendment will not increase current licensed emissions. This modification is therefore determined to be a minor modification and has been processed as such.

II. BEST PRACTICAL TREATMENT (BPT)

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Department regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas. BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in Chapter 100 of the Air Regulations. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

A. Incinerator

BVC is proposing to install a Jarvis Incinerator, model ISI40, manufactured in 2003, with a manufacturer’s maximum charge size of 400 lb and firing natural gas as the auxiliary fuel in one 750,000 Btu/hr and one 1,500,000 Btu/hr burners. The incinerator is subject to New Source Performance Standards (NSPS) 40 CFR 60, Subpart Ec, Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996. BVC may be exempt from the requirements of Subpart Ec provided that the facility burns only Type 4 waste in the incinerator.

BACT for the incinerator is the following:

1. A maximum particulate emission rate of 0.10 gr/dscf corrected to 12% CO₂ will be met.
2. Only Type 4 (veterinary) waste shall be disposed of in the incinerator. BVC shall not use the incinerator for the disposal of plastics, cytotoxic (antineoplastic) drugs, radioactive wastes or any medical waste classified as Type 7 waste.
3. Visible emissions from the incinerator shall not exceed 10% opacity on a 6-minute block average basis.
4. Operating temperature in the secondary chamber shall be maintained at or above 1600°F, with a stack gas retention time, at or above 1600°F, of at least 1.0 second.

5. To insure an efficient burn, and to prevent odors and visible emissions, the secondary chamber will be preheated, as specified by the manufacturer, until the pyrometer temperature measures at least 1600°F.
6. The temperature in the secondary chamber shall be maintained at a minimum of 1600°F for the duration of the burn cycle.
7. A pyrometer and 1/4 inch test port shall be installed and maintained at that location of the incinerator or refractory lined stack which provides sufficient volume to insure a flue gas retention time of not less than 1.0 second at a minimum of 1600°F.
8. A log shall be maintained recording the weight of the waste charged, preheat time, charging time and the temperature of the secondary chamber every 60 minutes after start-up until, and including, final shutdown time. For facilities operating a chart recorder, the start time, date, and weight charged shall be logged on the chart.
9. The ash shall be disposed of in accordance with the requirements of the Bureau of Remediation and Waste Management.
10. The incinerator operator(s) shall receive adequate training to operate the incinerator in accordance with the manufacturer's specifications and shall be familiar with the terms of the Air Emission License.

B. Facility Annual Emissions

BVC shall not exceed the following emissions on a 12-month rolling total basis.

Total Allowable Annual Emission for the Facility
(used to calculate the annual license fee)

<u>Pollutant</u>	<u>Tons/Year</u>
PM	3.1
PM ₁₀	3.1
SO ₂	0.48
NO _x	0.78
CO	0.65
VOC	0.07

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-95-71-D-A subject to the conditions found in Air Emission License A-95-71-C-R and in the following conditions:

The following replaces Condition (17) of License A-95-71-C-R:

- (17) The incinerator shall not exceed the maximum design combustion rate of 100 lb/hr. Auxiliary fuel input to the primary and secondary chambers shall be natural gas.

The following replaces Condition (19) of License A-95-71-C-R:

- (19) The secondary chamber shall be preheated as specified by the manufacturer to a minimum of 1600°F prior to combusting any waste and shall be maintained at a minimum of 1600°F for the duration of the burn.

The following replaces Condition (22) of License A-95-71-C-R:

- (22) BVC shall not exceed a particulate matter emission limit of 0.10 gr/dscf corrected to 12% CO₂ from the auxiliary fuel. Therefore, based on the maximum design combustion rate, emissions from the incinerator shall not exceed the following:

Incinerator Emission Limits	
Pollutant	lb/hr
PM	0.71
PM₁₀	0.71
SO₂	0.11
NO_x	0.18
CO	0.15
VOC	0.02

Condition (20) of License A-95-71-C-R is deleted.

The following are new Conditions:

- (28) The incinerator shall be used for the disposal of Type 4 (veterinary) waste only.

**Broadway Veterinary Clinic
Penobscot County
Bangor, Maine
A-95-71-D-A**

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- (29) BVC shall pay the annual air emission license fee within 30 days of May 31 of each year. Pursuant to 38 MRSA §353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under 38 MRSA §341-D, subsection 3.
- (30) This amendment shall expire concurrently with Air Emission License A-95-71-C-R.

DONE AND DATED IN AUGUSTA, MAINE THIS _____ DAY OF _____ 2003.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAWN R. GALLAGHER, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: April 25, 2003

Date of application acceptance: May 16, 2003

Date filed with the Board of Environmental Protection: _____

This Order prepared by Rachel E. Pilling, Bureau of Air Quality